## **Recovery Plan Action Status**

Plan Name: South Florida Multi-Species Recovery Plan (68 spp.)

Plan Status: Final Plan Date: 18-May-99

Lead Agency: USFWS
Lead Office: South Florida Ecological Services Field Office
562-3909)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Crenulate lead- plant (Amorpha crenulata)	1	acre-h1.1	Assess the available GIS data for crenulate lead-plant (Amorpha crenulata).	Complete	FY 2000 - FY 2004	FY 2000 - FY 2004	Fairchild Tropical Garden	Research: General	Species Expert	Completed by Fairchild. Action lead(s): NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-h1.2	Create coverage of population locations.	Not Started			Department of Environmental Resources Management, Non- governmental organizations	Work type not yet selected	Labor type not yet selected	Fairchild has data. Action lead(s): FWS, counties
Crenulate lead- plant (Amorpha crenulata)	1	acre-h1.3	Acquire recent imageries of the sites.	Not Started			South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS, counties
Crenulate lead- plant (Amorpha crenulata)	1	acre-h1.4	Distribute the coverage.	Not Started			South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-h2.1	Protect pine rockland habitat.	Ongoing Current	FY 1995 - FY 1999		South Florida counties	Other	Labor type not yet selected	Cost will vary depending on specific needs. Action lead(s): FWS, NPS, counties
Crenulate lead- plant (Amorpha crenulata)	1	acre-h2.2	Protect or acquire privately owned sites.	Partially Complete	FY 1995 - FY 1999		Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, South Florida counties	Work type not yet selected	Labor type not yet selected	Cost dependent upon specific site and amount of land acquired. Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-h2.3.1	Eliminate human- caused degradation.	Ongoing Current	FY 1995 - FY 1999		South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-h2.3.2	Control invasive plants, particularly exotics.	Partially Complete	FY 1995 - FY 1999		South Florida counties	Work type not yet selected	Labor type not yet selected	Cost is per acre (ex. 1.0/acre); Total cost dependent upon number of acres infested with exotics. Action lead(s): FWS, counties

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Crenulate lead- plant (Amorpha crenulata)	1	acre-h3.1	Eliminate physical degradation of habitat and restore to optimal conditions.	Ongoing Current	FY 1995 - FY 1999		South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Cost is per acre (ex. 0.5/acre); Total cost dependent upon number of acres restored. Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-h3.2	Develop best management practices for pine rocklands.	Partially Complete	FY 2005		South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-h3.3	Implement necessary management.	Ongoing Current	FY 1995 - FY 1999		South Florida counties	Management: General	Labor type not yet selected	Cost dependent upon type of management implemented. Action lead(s): FWS, counties
Crenulate lead- plant (Amorpha crenulata)	1	acre-h3.4	Continue to expand prescribed burning.	Ongoing Current	FY 1995 - FY 1999		South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	After task is complete and a normal fire rotation is achieved, growing season burns will be employed to maintain appropriate burn regime. Action lead(s): FWS, DOF
Crenulate lead- plant (Amorpha crenulata)	1	acre-h4.1	Monitor sites with crenulate lead-plant populations to determine success.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Management: Population Monitoring	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-h4.2	Investigate fire history and incorporate into management strategies.	Not Started			Department of Environmental Resources Management, Florida Division of Forestry	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-h4.3	Rehydrate soils where feasible.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS

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Crenulate lead- plant (Amorpha crenulata)	1	acre-h5.0	Continue implementation of the fire education program and modify as necessary, any fire management education program that has been developed.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Management: Habitat Maintenance and Manipulation	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	2	acre-s1.0	Conduct surveys to determine distribution of crenulate lead-plants.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, Non- governmental organizations	Research: Population Assessment	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	2	acre-s2.1	Augment natural populations of crenulate lead-plants, where appropriate.	Not Started			Non-governmental organizations	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	1	acre-s2.2	Continue work with ex situ propagation and seed storage banks.	Ongoing Current	FY 1995 - FY 1999		Non-governmental organizations	Research: Propagation	Labor type not yet selected	Action lead(s): NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-s2.3	Continue to identify potential reintroduction sites and reintroduce pine rockland plants, where appropriate.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, Non- governmental organizations	Management: Reintroduction	Labor type not yet selected	Action lead(s): NGO
Crenulate lead- plant (Amorpha crenulata)	3	acre-s2.4.1	Initiate section 7 consultation when applicable.	Ongoing Current	FY 1995 - FY 1999		U.S. Bureau of Land Management, U.S. Department of Agriculture, U.S. Geological Survey, Biological Resources Division, U.S. Geological Survey, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, Natural Resources Conservation Service , United States Coast Guard , U.S. Air Force	Work type not yet selected	Labor type not yet selected	Cost included in standard operating procedures of Federal agency's budget. Action lead(s): All Federal agencies
Crenulate lead- plant (Amorpha crenulata)	2	acre-s2.4.2	Encourage implementation of management plans.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Management: Planning	Labor type not yet selected	Cost dependent upon the management plan implemented. Action lead(s): FWS

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Crenulate lead- plant (Amorpha crenulata)	3	acre-s2.4.3	Continue to enforce take and trade prohibitions.	Ongoing Current	FY 1995 - FY 1999		Florida Department of Agriculture and Consumer Services/Division of Plant Industry	Work type not yet selected	Labor type not yet selected	Cost included in standard operating budgets of participating agencies. Action lead(s): FWS, FDACS/DPI
Crenulate lead- plant (Amorpha crenulata)	2	acre-s3.1	Continue to investigate and refine the habitat needs of crenulate lead-plant.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Research: Habitat Requirements	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	2	acre-s3.2	Determine population size and viability of all populations.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Fairchild has monitored acre populations since 2000. Action lead(s): NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-s3.3	Study the reproductive biology of crenulate lead-plant.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): NGO
Crenulate lead- plant (Amorpha crenulata)	2	acre-s3.4	Conduct genetic studies to document the genetic variation within and between populations.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-s3.5	Study the fire ecology of A. crenulata.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS
Crenulate lead- plant (Amorpha crenulata)	2	acre-s3.6	Study the response of crenulate lead-plant to habitat management treatments.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Research: Management Techniques	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-s4.1	Collect existing and historical data.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): NGO

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Crenulate lead- plant (Amorpha crenulata)	1	acre-s4.2	Monitor status and success of all populations; change management practices if so indicated.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	2	acre-s4.3	Convene a meeting of researchers and land managers.	Not Started			Department of Environmental Resources Management, South Florida counties	Work type not yet selected	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	2	acre-s4.4	Monitor reintroduction success and modify procedures as necessary.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Research: Population Assessment	Labor type not yet selected	Action lead(s): FWS, NGO
Crenulate lead- plant (Amorpha crenulata)	1	acre-s5.0	Continue to provide public information about pine rocklands and their unique flora.	Ongoing Current	FY 1995 - FY 1999		Department of Environmental Resources Management, South Florida counties	Other: Information and Education	Labor type not yet selected	Action lead(s): FWS, NGO